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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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10/805,111

03/19/2004

Fabio R. Maino

ANDIP041/9026

8499

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01/18/2007

BEYER WEAVER LLP

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EXAMINER

HENEGHAN, MATTHEW E

ART UNIT

PAPER NUMBER

2134

SHORTENED STATUTORY PERIOD OF RESPONSE	MAIL DATE	DELIVERY MODE
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3 MONTHS

01/18/2007

PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

If NO period for reply is specified above, the maximum statutory period will apply and will expire 6 MONTHS from the mailing date of this communication.

Office Action Summary	Application No. 10/805,111	Applicant(s) MAINO ET AL.	
	Examiner Matthew Heneghan	Art Unit 2134	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 19 March 2004.
- 2a) ☐ This action is FINAL. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-19 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-19 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 19 March 2004 is/are: a) ☐ accepted or b) ☒ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|---|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08)
Paper No(s)/Mail Date <u>4/5/04</u> . | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

1. Claims 1-19 have been examined.

Information Disclosure Statement

2. The following Information Disclosure Statement in the instant application has been fully considered:

IDS filed 5 April 2004.

Drawings

3. The drawings are objected to because item 403 in figure 4 and item 503 in figure 5 each have labels that overlay the lines of the figures.
4. The drawings are objected to as failing to comply with 37 CFR 1.84(p)(5) because they include the following reference characters not mentioned in the description: figure 3, item 301; figure 5, item 509; and figure 6, items 653, 655, 657, 659, 670, and 672.
5. Corrected drawing sheets in compliance with 37 CFR 1.121(d), or amendment to the specification to add the reference character(s) in the description in compliance with

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37 CFR 1.121(b) are required in reply to the Office action to avoid abandonment of the application. Any amended replacement drawing sheet should include all of the figures appearing on the immediate prior version of the sheet, even if only one figure is being amended. Each drawing sheet submitted after the filing date of an application must be labeled in the top margin as either "Replacement Sheet" or "New Sheet" pursuant to 37 CFR 1.121(d). If the changes are not accepted by the examiner, the applicant will be notified and informed of any required corrective action in the next Office action. The objection to the drawings will not be held in abeyance.

Claim Rejections - 35 USC § 112

The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

6. Claim 15 is rejected under 35 U.S.C. 112, second paragraph, as being incomplete for omitting essential elements, such omission amounting to a gap between the elements. See MPEP § 2172.01. The claim recites an apparatus for receiving Common Transport Information Units, but only the means for processing a CTIU that is already in the system in which the method is being performed is actually recited in the claim's limitations. Since no receiving means are recited in the claim's limitations, the claim is incomplete. For purposes of this action, it is being presumed that claim 15 also has a means for receiving Common Transport Information Units.

Double Patenting

The nonstatutory double patenting rejection is based on a judicially created doctrine grounded in public policy (a policy reflected in the statute) so as to prevent the unjustified or improper timewise extension of the "right to exclude" granted by a patent and to prevent possible harassment by multiple assignees. See *In re Goodman*, 11 F.3d 1046, 29 USPQ2d 2010 (Fed. Cir. 1993); *In re Longi*, 759 F.2d 887, 225 USPQ 645 (Fed. Cir. 1985); *In re Van Ornum*, 686 F.2d 937, 214 USPQ 761 (CCPA 1982); *In re Vogel*, 422 F.2d 438, 164 USPQ 619 (CCPA 1970); and, *In re Thorington*, 418 F.2d 528, 163 USPQ 644 (CCPA 1969).

A timely filed terminal disclaimer in compliance with 37 CFR 1.321(c) may be used to overcome an actual or provisional rejection based on a nonstatutory double patenting ground provided the conflicting application or patent is shown to be commonly owned with this application. See 37 CFR 1.130(b).

Effective January 1, 1994, a registered attorney or agent of record may sign a terminal disclaimer. A terminal disclaimer signed by the assignee must fully comply with 37 CFR 3.73(b).

7. Claims 1-8, 10, and 12-19 provisionally rejected on the ground of nonstatutory obviousness-type double patenting as being unpatentable over claims 26-30, 36, 37, 40, 42-43, and 48-50 of copending Application No. 10/034,367. Although the conflicting claims are not identical, they are not patentably distinct from each other because the claims of the '367 application, which must be, in order to be executed on a client or server, embodied on a machine-readable medium, anticipate all of the claims of the instant application except for the use of CT_IUs.

Official notice is given that it is well-known in the art to use CT_IUs in a fibre channel system, as the use of industry standards promotes interoperability.

Therefore it would have been obvious to one of ordinary skill in the art at the time the invention was made to implement the invention of the '367 application using

CT_IUs, as is well-known in the art, as the use of industry standards promotes interoperability.

This is a provisional obviousness-type double patenting rejection.

Claim Rejections - 35 USC § 102

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

8. Claims 1, 3-7, 9-13, and 15-19 are rejected under 35 U.S.C. 102(b) as being anticipated by NCITS, "Fibre Channel Generic Services – 3, Rev. 7.01," November, 2000 (hereinafter NCITS).

As per claims 1, 3, 7, and 13, NCITS discloses a fibre channel security arrangement wherein CTIUs are transmitted between two nodes in a Fibre Channel network (see Section 4.3, first paragraph). The CTIU that is transmitted by or received at any node must be processed according to this standard. Encryption of bulk data (see section 9.1.1.1.3) is used according to preamble values that must be identified (see sections 9.1.1.4 and 9.1.1.5). The information is used to fetch algorithm key information from a key server databases, which contain security information, including key

information, for each client, including the source and destination (security databases) (see section 9.1.2).

As per claims 4 and 10, NCITS discloses several encryption algorithms including DES (see section 9.1.1.5).

As per claim 5, NCITS discloses both authentication of a CTIU (see section 9.1.1.1.4), Authentication Hash Block and confidentiality through encryption of bulk data (see section 9.1.1.1.3). The receiver must necessarily recognize both functionalities. The retrieved key from the security database, described, above, is used for authentication.

As per claim 6, NCITS discloses support for endpoints that are domain controllers (see section 6.1.2.1.4) and N_Ports (see section 4.3.1.4).

As per claims 9 and 11, NCITS additionally discloses the use of Extended CT_IU preambles with Authentication Hash Blocks (see section 4.3.2).

As per claim 12, NCITS discloses the padding of data before encryption (see Appendix A.6, first bullet point).

Regarding claim 15, the use of authentication data such as NCITS' hashes confirms that a transmission has not been subject to tampering.

Regarding claims 16-19, in order for a program to be executed on a client or server, it must be, at some point, embodied on a machine-readable medium.

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The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

9. Claims 2, 8, and 14 are rejected under 35 U.S.C. 103(a) as being unpatentable over "Fibre Channel Generic Services – 3, Rev. 7.01, November, 2000" as applied to claims 1, 7, and 13 above, and further in view of U.S. Patent No. 6,061,794 to Angelo.

NCITS does not state whether or not mutual authentication between clients is necessary before the key server creates its entries.

Angelo discloses mutual authentication at initialization time and a subsequent creation and storing of per node rules in the appropriate location in order to prevent a remote device from masquerading as a local device and thereby avoid authorization checks performed during run-time operation (see abstract and column 7, lines 1-19 and 28-38).

Therefore, it would be obvious to one of ordinary skill in the art at the time the invention was made to modify the invention of NCITS by performing mutual authentication at initialization time and a subsequent creation and storing of per node rules in the key server, in order to prevent a remote device from masquerading as a local device and thereby avoid authorization checks performed during run-time operation.

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Conclusion

10. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Matthew E. Heneghan, whose telephone number is (571) 272-3834. The examiner can normally be reached on Monday-Friday from 8:30 AM - 4:30 PM Eastern Time.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Gilberto Barron, can be reached at (571) 272-3799.

Any response to this action should be mailed to:

Commissioner of Patents and Trademarks
P.O. Box 1450
Alexandria, VA 22313-1450

Or faxed to:

(571) 273-3800

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is (571) 272-2100.

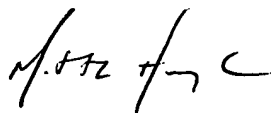
Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

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MEH

A handwritten signature in black ink, appearing to read 'M. Heneghan' with a stylized flourish at the end.

January 10, 2007

Matthew Heneghan, USPTO Art Unit 2134